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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,883	10/29/2001	Phillip A. Danner	120751	1812
23465	7590	10/01/2004	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			JONES, PRENELL P	
			ART UNIT	PAPER NUMBER
			2667	
DATE MAILED: 10/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/682,883	DANNER ET AL.
Examiner	Art Unit	
Prenell P Jones	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 October 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 11 is/are allowed.
- 6) Claim(s) 1-4, 7, 12, 14 and 17 is/are rejected.
- 7) Claim(s) 5, 6, 8-10, 13, 15, 16 and 18-20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 5.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6 of copending Application No. 10/066,532. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the limitations of claims 1 and 6 of US Pat. 10/066,532 to create claim 1 of the present application. As well, it would have been equally obvious to one of ordinary skill in the art at the time of the invention to create claims 1 and 6 of US Patent 10/066,532 by manipulating claim 1

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of the present application into two individual claims, hence developing claims 1 and 6 of US Patent 10/066,532. The limitation of claim 1 is encompassed in the combined limitations of claims 1 and 6 of US Patent 10/066,532.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 4, 7, 12, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et al in view of Hakim and Compaq.

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Regarding claims 1, 3, 4, 12 and 14, Raab (Abstract, col. 3, line 56 thru col. 4, line 60) discloses a networking system that implements inter-networking and whose architecture includes a switching network (Ethernet) wherein the Ethernet switch has a plurality of ports and coupled to a plurality of hubs or concentrators which are coupled to end-stations, end-to-end communication, Ethernet switch accommodates high-end VLAN applications and switch includes a plurality of plug-in modules, Hakim discloses (Abstract, col. 5, line 27-45, col. 12, line 28-67) a computer-based information technology infrastructure to meet the needs of industrial training centers wherein end-to-end communication is provided whereby the architecture includes an integration of wireless LANs, (col. 12, line 35-67) utilization of flexible industrial and educational computer system that includes desktop environment, (col. 41, line 50 thru col. 43, line 67) WLANs are utilized, WLANs (col. 36, line 65 thru col. 37, line 33, col. 41, line 50 thru col. 42, line 10) devices such as, Ethernet utilize portions of the radio spectrum, utilization of IRWLAN, accommodating Ethernet ports or radio ports and (col. 32, line 3-51) virtual private networks are proprietary, use of virtual networks for providing adequate security for users, Ethernet devices, (col. 42, line 39-67) WLAN/Ethernet technical details reveal temperature range of -20 to 60 °C, . Both Raab and Hakim are silent on Ethernet device configured to be operable within a non-condensing humidity range between 10% and 95% and switch configured to operate at least at one Gigabit/second. In analogous art, Compaq discloses an (pages 1-2) Ethernet switch that supports high-end features, such as VLAN protocol, RMON and Spanning tree and (page 4) a storage environment whereby the humidity is 10% to 95% non-condensing and switch operating at one gigabit. Therefore, it would have been obvious to one of ordinary skill in the art to motivated to implement a humidity range between 10-95%

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which is taught by Compaq with the combined teachings of Raab and Hakim to increase durability of a system.

Regarding claims 7 and 17, as mentioned above, Compaq discloses an (pages 1-2) Ethernet switch that supports high-end features, such as VLAN protocol, RMON and Spanning tree and (page 4) a storage environment whereby the humidity is 10% to 95% non-condensing and switch operating at one gigabit. Compaq further discloses on pages 2-4 that the Compaq SW5425 Ethernet switch accommodates VLAN, QoS, RMON, Spanning tree and SNMP communication.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raab et al in view of Hakim and Compaq as applied to claims 6, 12 and 16 above, and further in view of Haddock et al.

Regarding claim 2, Raab (Abstract, col. 3, line 56 thru col. 4, line 60) discloses a networking system that implements inter-networking and whose architecture includes a switching network (Ethernet) wherein the Ethernet switch has a plurality of ports and coupled to a plurality of hubs or concentrators which are coupled to end-stations, end-to-end communication, Ethernet switch accommodates high-end VLAN applications and switch includes a plurality of plug-in modules, and Hakim discloses (Abstract, col. 12, line 28-67) a computer-based information technology infrastructure to meet the needs of industrial training centers wherein end-to-end communication is provided whereby the architecture includes an integration of wireless LANs, (col. 12, line 35-67) utilization of flexible industrial and educational computer system that includes desktop environment, (col. 41, line 50 thru col. 43, line 67) WLANs are utilized, WLANs (col. 36, line 65 thru

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col. 37, line 33, col. 41, line 50 thru col. 42, line 10) devices such as, Ethernet utilize portions of the radio spectrum, utilization of IRWLAN, accommodating Ethernet ports or radio ports and (col. 32, line 3-51) virtual private networks are proprietary, use of virtual networks for providing adequate security for users, Ethernet devices, (col. 42, line 39-67) WLAN/Ethernet technical details reveal temperature range of -20 to 60 °C. Raab and Hakim are silent on stackable Ethernet switches. In analogous art, Haddock discloses (Abstract, Fig. 1, col. 1, line 44-67) in an interconnecting forwarding device system whereby the architecture includes a plurality of Ethernet devices/switches, which are known in the art to come in a stackable or chassis-based form. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement stackable Ethernet switches as taught by Haddock with the combined teachings of Raab and Hakim for the purpose of limiting space/area usage.

Allowable Subject Matter

5. Claim 11 is allowed over prior art.
7. Claims 5, 6, 8-10, 13, 15, 16 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Although the cited prior art discloses a networking system that implements inter-networking and whose architecture includes a switching network wherein the Ethernet switch has a plurality of ports and coupled to a plurality of hubs or concentrators which are coupled to end-stations, Ethernet switch accommodates high-end VLAN applications and switch includes a plurality of plug-in modules, utilization of flexible industrial and

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educational computer system that includes desktop environment, WLANs are utilized, WLANs devices such as, Ethernet utilize portions of the radio spectrum, utilization of IRWLAN, accommodating Ethernet ports or radio ports and virtual private networks are proprietary, use of virtual networks for providing adequate security for users, Ethernet devices, WLAN/Ethernet technical details reveal temperature range of -20 to 60 °C, and Ethernet switch that supports high-end features, such as VLAN protocol, RMON, QoS, SNMP and Spanning tree and (page 4) a storage environment whereby the humidity is 10% to 95% non-condensing and switch operating at one gigabit they fail to teach or suggest Ethernet switch containing a plurality of diagnostic contacts for each port, an audible failure mode, an auto-enunciation mode, Ethernet switch configured to maintain industrial devices in a VLAN separate from office device VLAN, accommodating a shock vibration of at least 2g and 4g, production system comprises of at least two Ethernet switches redundantly coupling office device to industrial device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 703-305-0630. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 and (571) 273-3180.

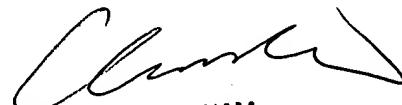
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones



August 19, 2004


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 8/20/07